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EXAMINER

NGUYEN, HAI L

ART UNIT PAPER NUMBER

2816

DATE MAILED: 09/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/966,481

Applicant(s)

MOYAL, NATHAN Y.

Examiner

Hai L. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Pri rity under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4</u> . | 6) <input type="checkbox"/> Other:  |

## DETAILED ACTION

### *Specification*

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the recited limitations that the integrated circuit (16 in instant Fig.5) of claim 14 “including an inverter that creates a high signal in response to a low signal” on the feedback path (55), in claim 15; and “a pair of transistors that must both conduct in order to generate the pulses”, in claim 16, are not supported either by the disclosure or the drawings. Also, the recited limitations “an inverter”, in claim 27 and “a pair of transistors”, in claim 28, have same problems. There are insufficient antecedent basis for these limitations in the claims.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 15-18 and 27-30 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In claims 15 and 16, the further description of the integrated circuit including an inverter and a pair of transistors has not been enabled in the specification. The details of such limitations are not seen in the description of the preferred embodiment (Fig.5). It is not clear as currently defined, how the instant invention can operate with those recited limitations.

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Claims 17 and 18 are rejected due to their dependencies on the base claims 15 and 16.

Claims 27-30 are similarly rejected, note the above discussion with regard to claims 15-18.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite because the limitations “a supply voltage”, on line 4, and “a predetermined level”, on line 7, lack clear antecedent basis. It appears that this “supply voltage” is the same as “supply voltage,” recited on line 2 of claim 1 and “predetermined level” is the same as “predetermined level” recited on line 3 of claim 1.

Claim 2 recites the limitation "said logic" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claims 3-10 are rejected due to their dependencies on claims 1 and 2.

Claim 11 is indefinite because the limitation “a supply voltage”, on line 5, lacks clear antecedent basis. It appears that this “supply voltage” is the same as “supply voltage” recited on lines 2-3 of claim 11. Furthermore, claim 11 is rejected as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: a feedback path (55 in instant Fig.5); a capacitor circuit (44); and a hysteresis sense stage (48a-b). In order for the pulse generator (54 in instant Fig.5) to generate pulses to indicate that a supply voltage is ramping up and to terminate the generation of

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the pulses after the supply voltage reaches a predetermined level, those omitted elements need to be included in the claim.

Claims 12-20 are rejected due to their dependencies on claim 11.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 2, 10, 11, 13, 14, 21, 22, 25, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Conary (US 5,570,050).

With regard to claims 1 and 11, Conary discloses in Fig.6 an integrated circuit, and a method of use thereof, comprising an activation circuit (600) to determine whether a supply voltage reaches a predetermined level; a pulse generator (400) to generate pulses (700) to indicate that the supply voltage (401) is ramping up and to terminate the generation of the pulses after the supply voltage reaches a predetermined level; and the activation circuit to prevent the pulses from being generated again, after the generation of the pulses has been terminated, until after the next power cycle.

With regard to claim 2, Conary also meet the claimed limitation (see column 1).

With regard to claim 13, the level detector (300) that detects when a voltage is above at least two transistor threshold voltages, the level detector operative to control the pulse generator (column 5, line 30 through column 6, line 11).

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With regard to claim 14, the integrated circuit feedback path (from 402 to 622, though 300 and 500) that provides the output of the pulse generator to the activation circuit.

With regard to claim 21, Conary discloses in Fig.6 a power-on reset pulse generator comprising a first circuit (400) to develop a pulse (700) indicating that a power supply voltage is not in a first state; and a second circuit (600) coupled to the first circuit to latch the first circuit in response to the power supply voltage being in the first state.

With regard to claim 22, the claimed limitation is also met by the prior art.

Claims 10, 25, and 26 are similarly rejected, note the above discussion with regard to claims 13 and 14.

### *Claim Rejections - 35 USC § 103*

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 3-9, 12, 20, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conary in view of Ansel et al. (US 5,809,312).

With regard to claim 12, the above discussed the integrated circuit of Conary meets all of the claimed limitations except for a logic functionality (52 in instant Fig.5) to emulate logic that is difficult to trigger and to determine whether the supply voltage has reached a level sufficient to trigger the difficult to trigger logic. Ansel et al. teaches in Fig.3 a circuit having a logic functionality (310) as recited in the claim. Therefore, it would have been obvious to one of

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ordinary skill in the art at the time of applicant's invention was made to utilize that logic functionality taught by Ansel et al. with the prior art (Fig.6 of Conary) in order to ensure all of the critical integrated circuits are operating correctly.

With regard to claims 3 and 20, the above discussed the integrated circuit of Conary meets all of the claimed limitations except for a circuit (14 in instant Fig.1) to latch the pulse generator in response to the supply voltage being in a first state. Ansel et al. teaches in Fig.3 a circuit having a latching circuit (351) as recited in the claim. Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to utilize that latching circuit taught by Ansel et al. with the prior art (Fig.6 of Conary) in order to activate all of the critical integrated circuits when the supply voltage is in a first state.

Claims 4-9 and 23 are similarly rejected; note the above discussion with regard to claim 12.

With regard to claim 24, the claimed limitation is also met by the prior arts.

***Allowable Subject Matter***

10. Claim 19 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

The prior art of record does not disclose or suggest an integrated circuit, and a method of use thereof, as recited in claim 19; and specifically the limitation directed to the activation circuit (40a in instant Fig.7) includes an inverter (64a) coupled to the gate of a load transistor(66a), a second transistor (68) coupled to the load transistor and a third transistor (70a) coupled between the load transistor and the first transistor.

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*Conclusion*

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shen (US 4,591,745) is cited as of interest because it discloses a power-on reset pulse generator.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai L. Nguyen whose telephone number is 703-306-9178 and Right Fax number is 703-746-3951. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 703-308-4876. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

  
HAI L. NGUYEN  
PATENT EXAMINER  
August 30, 2002